

REMARKS**I. Status of the Claims**

Claims 1-12 and 17-20 are currently pending for examination in this application. No amendments are presented in this paper.

II. Claims 12 and 17-20 are Novel

Applicant respectfully traverses the rejection of claims 12 and 17-20 under Section 102(b) over Emarkaryan (US 3,060,033) or The Joy of Soup: Rose Petal Recipes (claim 12 only).

Each of claims 12 and 17-20 recites either an aqueous sugary solution obtainable with the process of claim 1, or a confectionary product incorporating the aqueous sugary solution obtainable with the process of claim 1. Claim 1 recites, in relevant part, steps of fragmenting floral material and introducing it in an edible aqueous sugary solution, and pasteurising the aqueous sugary solution by heating it for a period of time ranging from 10 to 20 minutes at a temperature ranging from about 70°C to about 90°C and rapidly cooling it at a temperature ranging from about 10°C to about 0°C.

As discussed in a previous response, Emarkaryan does not teach preparation of a pasteurized aqueous sugary solution containing fragmented floral material as presently recited in claim 1. In contrast, Emarkaryan produces a dry rose containing food additive consisting solely of sugar and whole petals of Rosa demascena trigintipetala Dieck using a dry mixing process that does not involve heat. Even in Example IV discussing use of the disclosed dry additive for the preparation of a rose flavored jam, Emarkaryan does not produce a pasteurized intermediate aqueous sugary solution containing fragmented floral material such as that obtainable by the process of presently recited claim 1.

Emarkaryan describes the preparation of an additive which is dry, hence not an aqueous solution, obtained by mixing sugar and whole rose petals. The rose petals are not fragmented as in the presently recited claims. Emarkaryan goes to great lengths to describe a process that preserves intact rose petals, even stating that any machine used must exert a gentle mixing action in order that the rose petals are not damaged. (See Emarkaryan at col. 3, lines 3-6.) Thus, Emarkaryan fails to disclose a step of fragmenting floral material as presently recited. Because Emarkaryan does not disclose fragmenting floral material, Emarkaryan also does not disclose a step of introducing fragmented floral material into an aqueous sugary solution as presently

recited. Thus, Ermakaryan cannot disclose aqueous sugary solutions including fragmented floral material, or confectionary products incorporating such aqueous sugary solutions, as presently recited. Ermakaryan therefore does not anticipate any of claims 12 and 17-20.

According to one or more aspects of the presently recited claims, fragmentation of the petals may optimize the release of aromatic compounds compared to whole petals.

Furthermore, Ermakaryan also does not disclose a step of pasteurising an aqueous solution containing fragmented floral material by heating the solution for a period of time ranging from 10 to 20 minutes at a temperature ranging from about 70°C to about 90°C and rapidly cooling the solution at a temperature ranging from about 10°C to about 0°C. In contrast, Ermakaryan mixes a dry additive containing whole rose petals with water and boils it twice in order to produce a rose flavored jam. (See Ermakaryan at Example IV.) Thus, where heat is described in Ermakaryan, the temperature differs from that used in claim 1. In particular, the heating temperature recited in the present claims is below the boiling point of the solution, whereas in Example IV of Ermakaryan, the heat is harsher and consists of two stages, both at or above the boiling point of the solution (above 100°C) as it pertains to the preparation of a jam. Thus, any aqueous sugary solution disclosed by Ermakaryan is not pasteurized through heating and rapid cooling as required by the presently recited claims and therefore Ermakaryan cannot disclose aqueous sugary solutions, or confectionary products incorporating the same, as those presently recited. Ermakaryan therefore does not anticipate any of claims 12 and 17-20.

One or more aspects of the techniques recited in the present claims do not contemplate boiling the sugary solution as taught by Ermakaryan because this would result in the loss of desirable volatile compounds from the floral material, impoverishing the final aroma of a confectionary product. Thus, the recited pasteurization, involving heating and subsequent rapid cooling, may optimize the extraction of aromatic compounds from the fragmented floral material.

As discussed above, Ermakaryan does not disclose pasteurized aqueous sugary solutions containing fragmented floral material, or confectionary products incorporating such sugary solutions, as presently recited.

With specific reference to claim 12, Ermakaryan does not teach the preparation of a pasteurized sugary solution containing fragmented floral material. The rose flavored jam produced in Example IV of Ermakaryan, and any related intermediary, must necessarily be

different from the sugary solutions and confectionary products of the present claims in view of the reasons mentioned above.

With specific reference to claims 17-20, aspects of these claims do not concern solely jam, but also many other confectionary products, some of which are not contemplated by Emarkaryan whose rose additive will not tolerate certain processing parameters associated with other confectionary products. (See Emarkaryan at col. 3, lines 19-26.)

Emarkaryan therefore does not anticipate any of claims 12 and 17-20 because it fails to teach each recited claim element.

With respect to claim 12, the method described in the Joy of Soup: Rose Petal Recipes involves the boiling of sugar, whole rose petals and water for one hour. The solution is then strained to eliminate floral material, and the sieved solution is then boiled again.

Similar to Emarkaryan, the cited document fails to teach a step of fragmenting floral material as presently recited. Because the cited document fails to disclose fragmenting floral material, it also cannot disclose a step of introducing fragmented floral material into an aqueous sugary solution. Thus, any aqueous sugary solution disclosed by the Joy of Soup does not contain fragmented floral material as required by claim 12 and therefore the citation cannot disclose aqueous sugary solutions as those presently recited.

Nor does the Joy of Soup teach a step of pasteurizing an aqueous sugary solution containing fragmented floral material by heating the solution for a period of time ranging from 10 to 20 minutes at a temperature ranging from about 70°C to about 90°C and rapidly cooling the solution at a temperature ranging from about 10°C to about 0°C as presently recited. Thus, any aqueous sugary solution disclosed by the Joy of Soup is not pasteurized as required by claim 12 and therefore the citation cannot disclose aqueous sugary solutions as those presently recited. For the same reasons as those explained above, the Joy of Soup does not anticipate the present invention, in particular claim 12.

Claims 12 and 17-20 are therefore novel over the cited references. Reconsideration and withdrawal of the rejections under Section 102(b) is respectfully requested.

III. Claims 1-11 are Patentable over the Cited Combination

Claims 1-11 were rejected under Section 103(a) over Emarkaryan in view of Francis (Wiley Encyclopedia Food Sci. and Technol, 2nd Ed., Vol. 1-4, pp. 23-5-2321) and further in view of the Joy of Soup: Rose Petal Recipes. Applicant respectfully disagrees.

As discussed above, the process and products of Emarkaryan differ markedly from those claimed in the instant application. Emarkaryan lacks a pasteurization step, is only suitable for the specific rose petals and sugar disclosed, and the petals are not fragmented.

Francis does not cure the deficiencies of Emarkaryan. In particular, even if the pasteurization of Francis could be applied in Emarkaryan, all of the claim elements would not be present. Instead, a dry solution of whole rose petals and sugar would be pasteurized, which could result in caramelizing or burning of Emarkaryan's dry solution. No aqueous solution that includes fragmented floral material would be present.

The Joy of Soup also fails to cure the deficiencies of Emarkaryan because, as discussed above, the simmering technique disclosed by the citation does not involve fragmentation or pasteurization.

In addition, there is no proper teaching or suggestion in Emarkaryan to look to Francis for pasteurization. Instead, Emarkaryan states that the preparation of the dry food additive requires no heat and clearly describes that the solution does not tolerate extensive heating. (See Emarkaryan at col. 1, line 39 and col. 3, lines 16-24.) Emarkaryan thus teaches away from using pasteurization in the manner presently claimed. Emarkaryan only applies heat when making the jam in Example IV by a conventional method.

The Office Action asserts that it would have been obvious to select the claimed product processing temperatures, mentioning maple and corn syrups as examples in which pasteurization techniques are conventionally applied to sugary syrups. Such syrups are nonanalogous, however, in that they do not contain fragmented floral material, and their preparation does not involve considerations surrounding the extraction of volatile compounds from floral material. Francis teaches that pasteurization parameters may be adjusted according to results to be achieved, yet none of the cited references contemplate what is sought to be achieved in the present application. The presence of fragmented floral material entails adopting a unique pasteurization profile to optimize the extraction of aromatic compounds without affecting the appearance of the fragmented floral material. The consistency of a food material is also an

important consideration in obtaining microbial stability. The claimed techniques meet the design challenges unique to the present application and are patentable over the cited references.

In contrast to what is asserted in the Office Action, there is coaction of ingredients and process parameters in the present invention, optimizing conditions for extracting volatile compounds from floral material, achieving a pleasant visual impact in the finished product, and also providing a microbiologically safe food.

Fragmentation and pasteurization parameters synergize in the present claims to attain enhanced and unexpected results in terms of flavor release, visual impact of the finished product, as well as microbial stability of the sugary solution. Leaving the fragmented floral material in the sugary solution has the dual effect of optimizing the extraction of aromatic compounds and obtaining a pleasant visual effect in the final product. The cited references, alone or in valid combination, fail to recognize the presently recited techniques for optimizing the extraction of the aromatic compounds of the floral material while preserving the visual impact of the finished product and its microbial stability.

For the reasons provided above, claim 1 is patentable over the combination of Ermakaryan, Francis and the Joy of Soup. Each of claims 2-11 depends directly or indirectly from claim 1 and is therefore patentable over the cited combination for at least the same reasons.

Accordingly, Applicant respectfully request reconsideration and withdrawal of the Section 103 rejection.

IV. Conclusion

In view of the foregoing remarks, reconsideration is respectfully requested. If the Examiner believes, after this response, that the application is not in condition for allowance, the Examiner is invited to call the Applicant's representative at the telephone number listed below.

If this response is not considered timely filed and if a request for an extension of time is otherwise absent, Applicant hereby requests any necessary extension of time. If there is a fee occasioned by this response, including any extension fee, that is not covered by an accompanying payment, please charge any deficiency to Deposit Account No. 50/2762 (Ref. No. R2019-7701US).

By: /Nicole A. Palmer/
Nicole A. Palmer, Reg. No. 58,943
LANDO & ANASTASI, LLP
One Main Street; Eleventh Floor
Cambridge, MA 02142
Telephone: 617-395-7000
Facsimile: 617-395-7070